PHENIX

TECHNICAL SUPPORT 2013

PHENIX WEEKLY PLANNING

Dec. 12, 2013

Don Lynch

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TECHNICAL SUPPORT 2013

This Week

- Finish FVTX/VTX services and cooling
- Begin VTX & FVTX commissioning
- Finish Installing MPC-Ex sevices for run 14
- Complete MPC-Ex Installation
  - Remove MPC-Ex installation tool
  - Finish MPC-Ex rack assembly
  - Install MPC-Ex rack on MMS MuTrigger rack
  - Install LV cables from MPC-Ex rack
  - Install bias cables from MPC-Ex rack
  - Install control cables from MPC-Ex rack
  - Assemble MPC-Ex FEM's
  - Install FEM's
  - Install signal cable to FEM's
  - Install fiber from MPC-Ex rack to MPC-Ex FEM's
- Remove, disassemble and stow station 1 South scaffolding
- Begin IR & EC prep for move to IR
- Continue sPHENIX support
  - HCal prototype assembly
  - EMCal prototype assembly
  - Tilting/rotating Support Structure assembly & test
- Future IR evolution modeling
- PHENIX Annual Safety Review: Today after the planning meeting

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TECHNICAL SUPPORT 2013

Next Week

- Finish FVTX/VTX services and cooling
- Begin VTX & FVTX commissioning
- Complete MPC-Ex Installation
- Remove, disassemble and stow station 1 South scaffolding (if not already done)
- Finish IR & EC prep for move to IR
- Remove manlifts from IR
- Remove deck plates from IR
- Move MuID Collars into IR hold position
- Remove 12 ton cart from IR
- Begin Re-connecting gas sniffers, water, elect., gas, fibers to EC
- Begin Fold down EC platforms & reinstall dumb waiter (carpenters)
- Continue sPHENIX support
  - HCal prototype assembly
  - EMCal prototype assembly
  - Tilting/rotating Support Structure assembly & test
- Future IR evolution modeling
- Begin DC West broken wire repair

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VTX/FVTX

FVTX/VTX East & West Installedsurvey in IR, survey to be completed today, ready for commissioning by next week.

DC East & West Repairs Summary of Tasks

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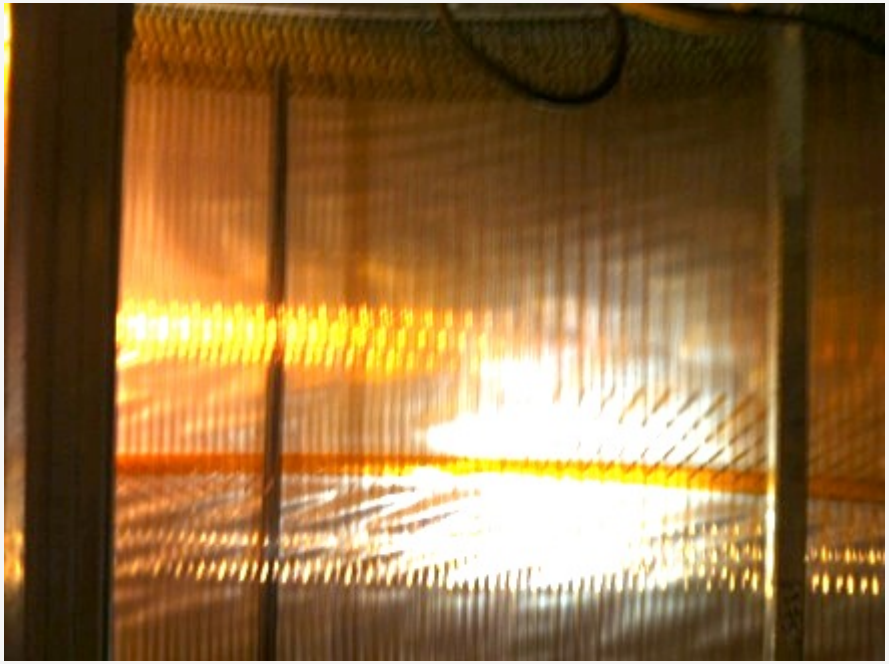
- DC West broken wire removal – 12/15 - 12/30



MPC-Ex Initial (Partial) Installation

Mechanical installation complete
Services in progress
Rack assembly & FEM assembly in progress

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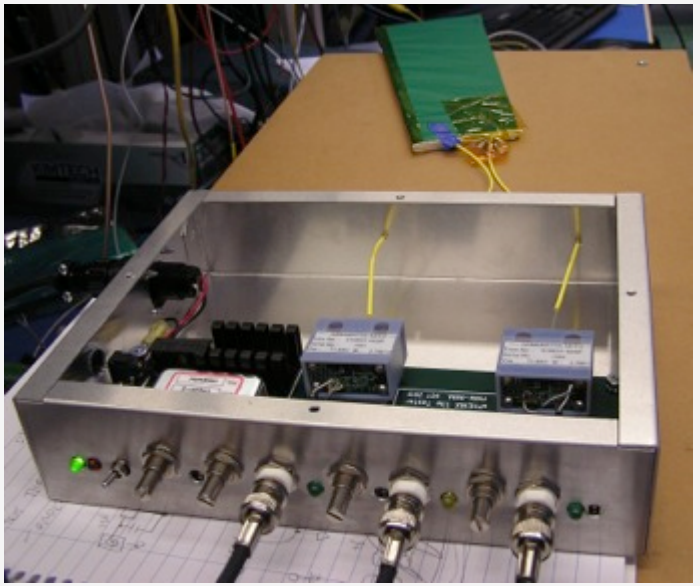
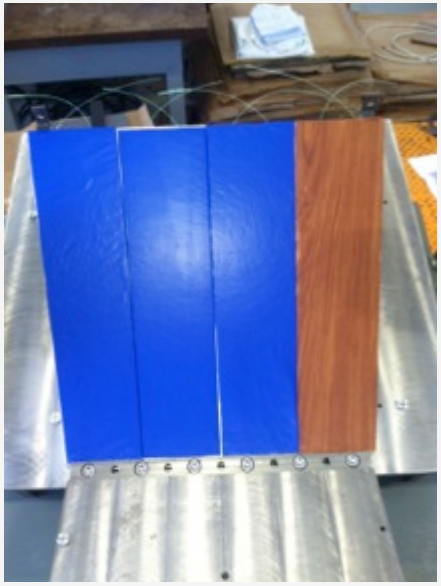
Hcal assembly in progress



Steve Boose's Tile tester

Hi-Bay
Prototype
Assembly Area



sPHENIX prototype
electronics rack

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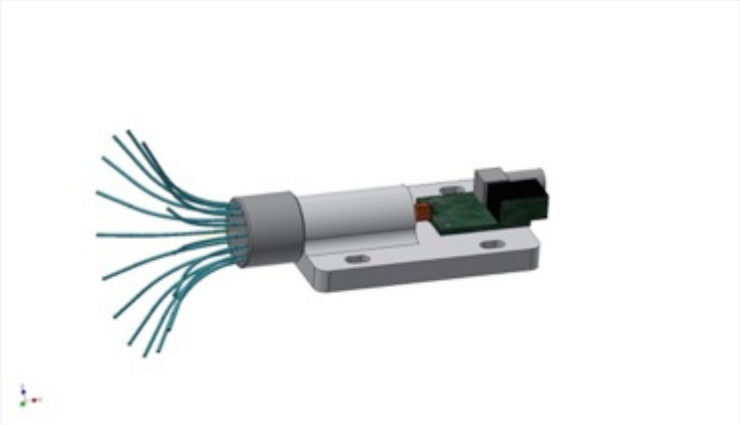
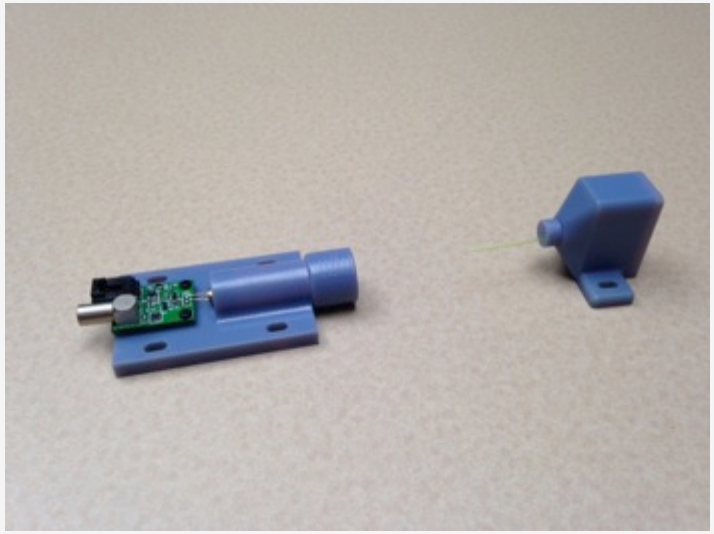
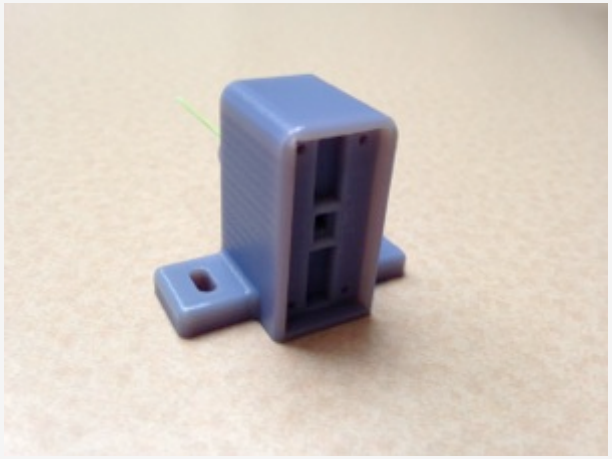
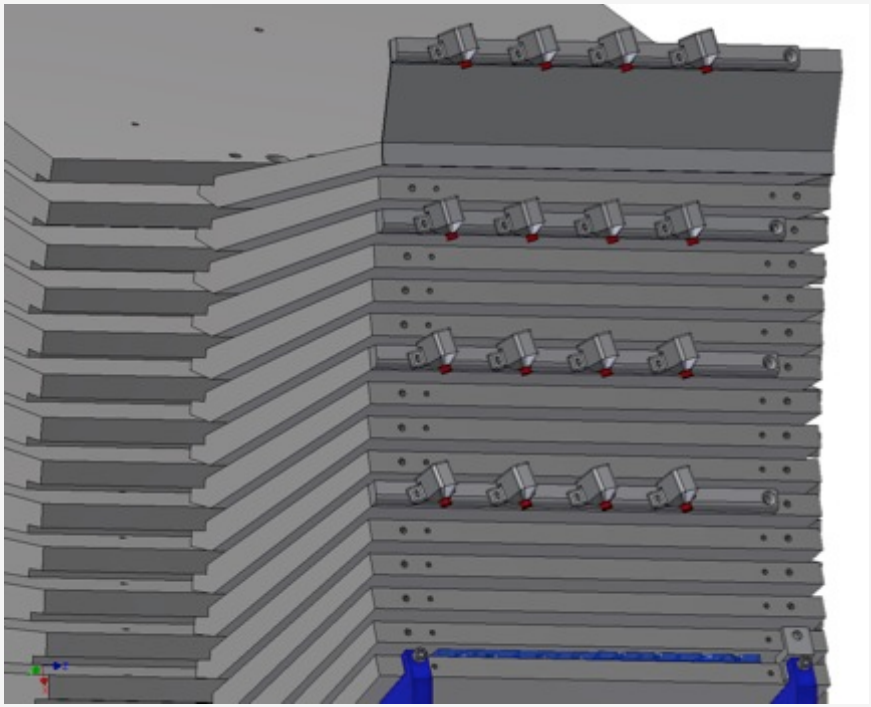
Light Collection for HCal









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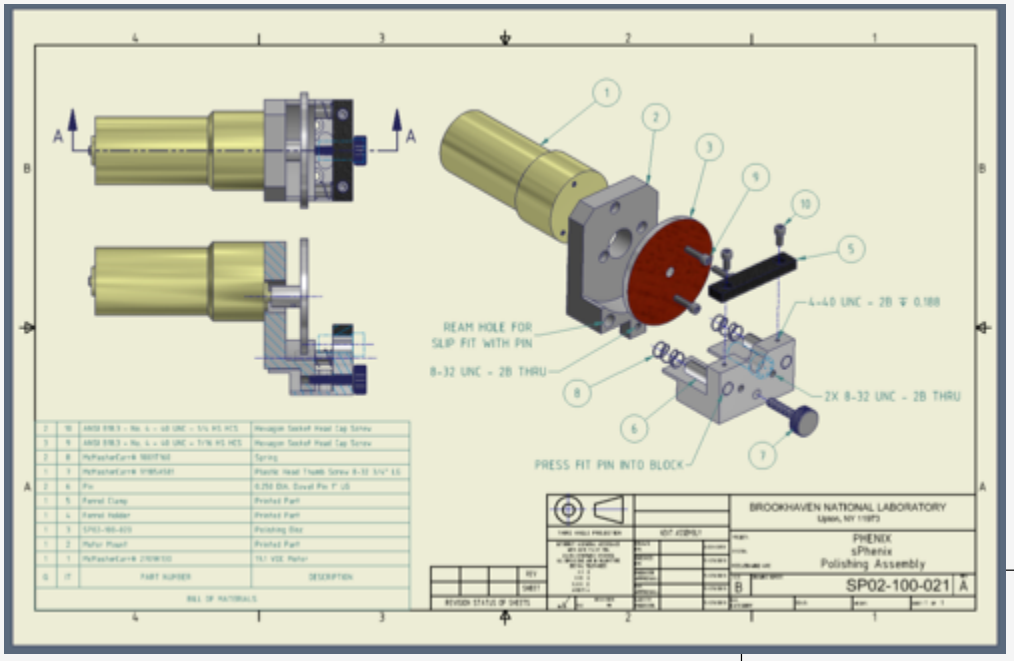

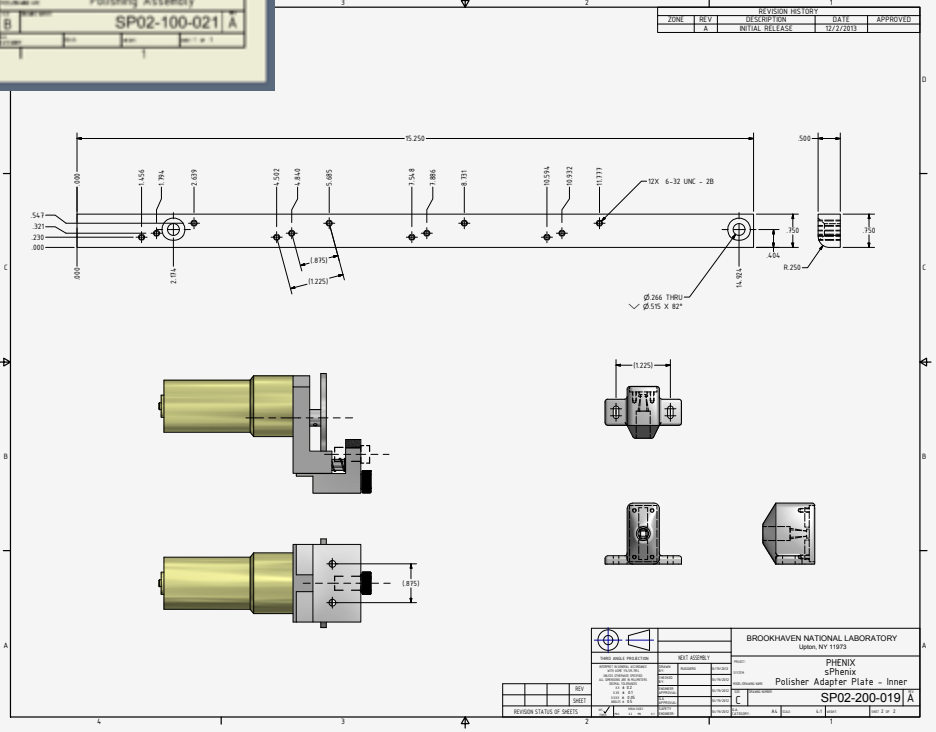

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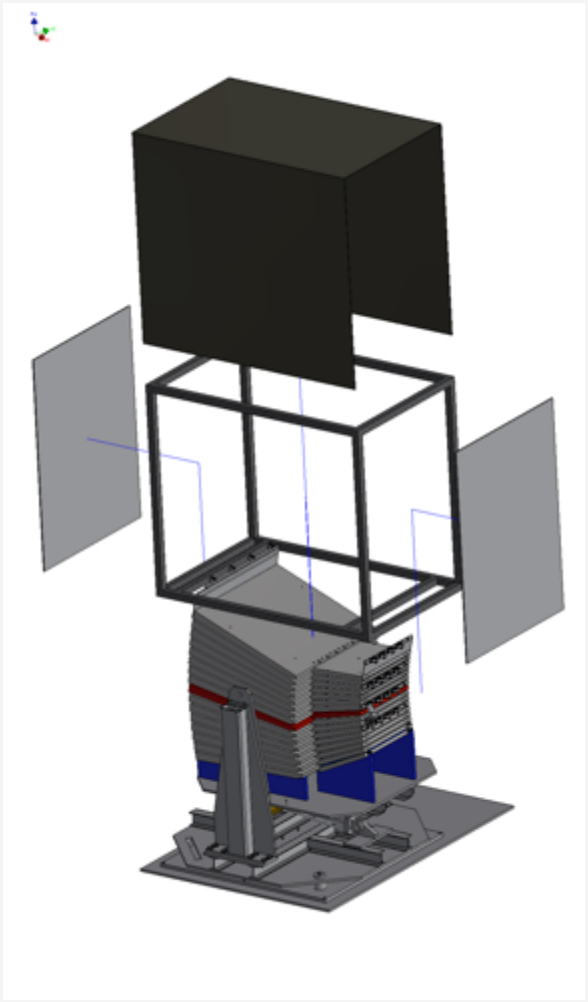
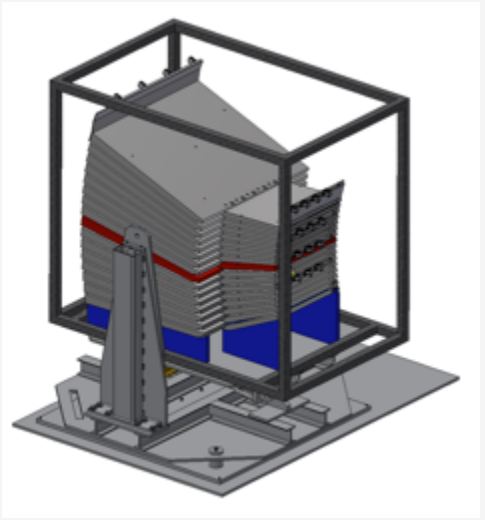
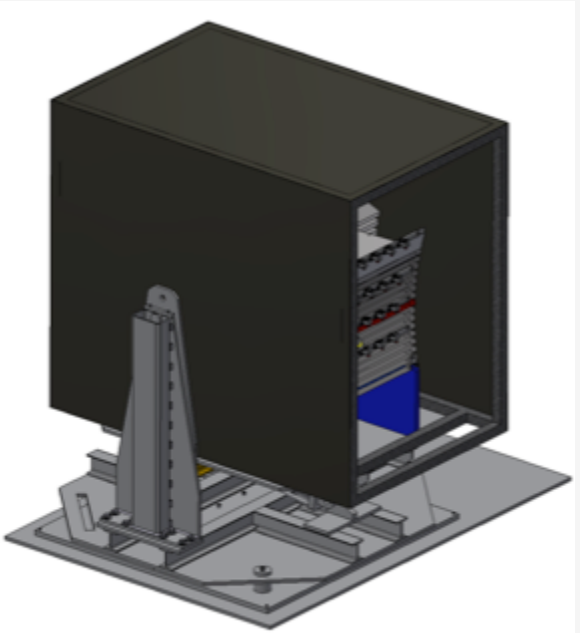
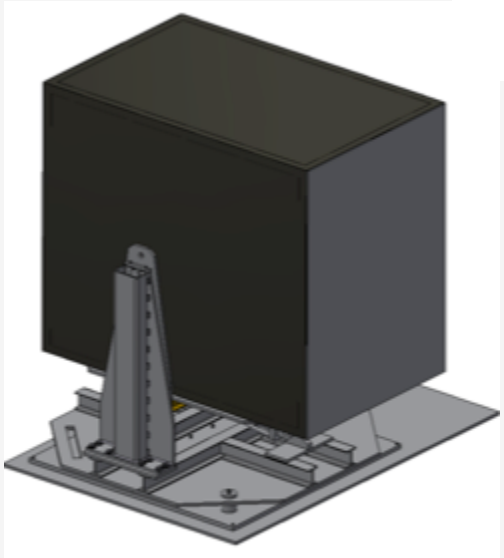
Hcal Light-Tight Enclosure









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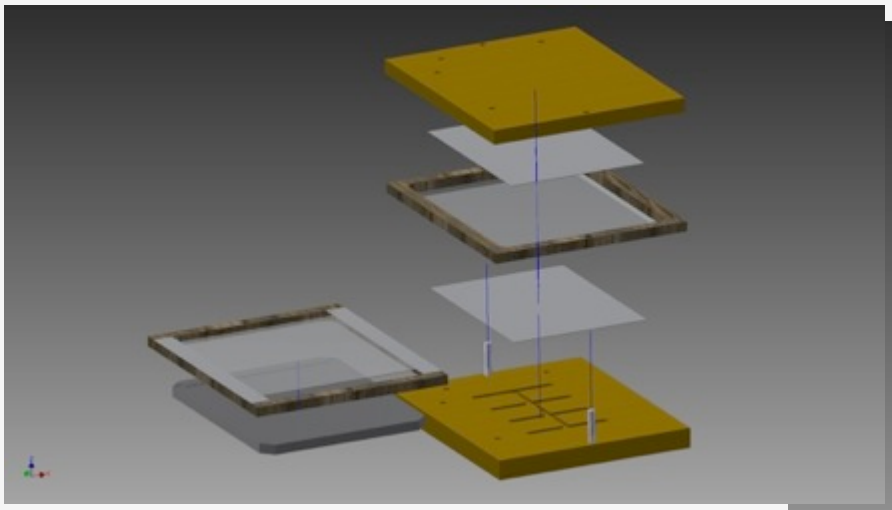
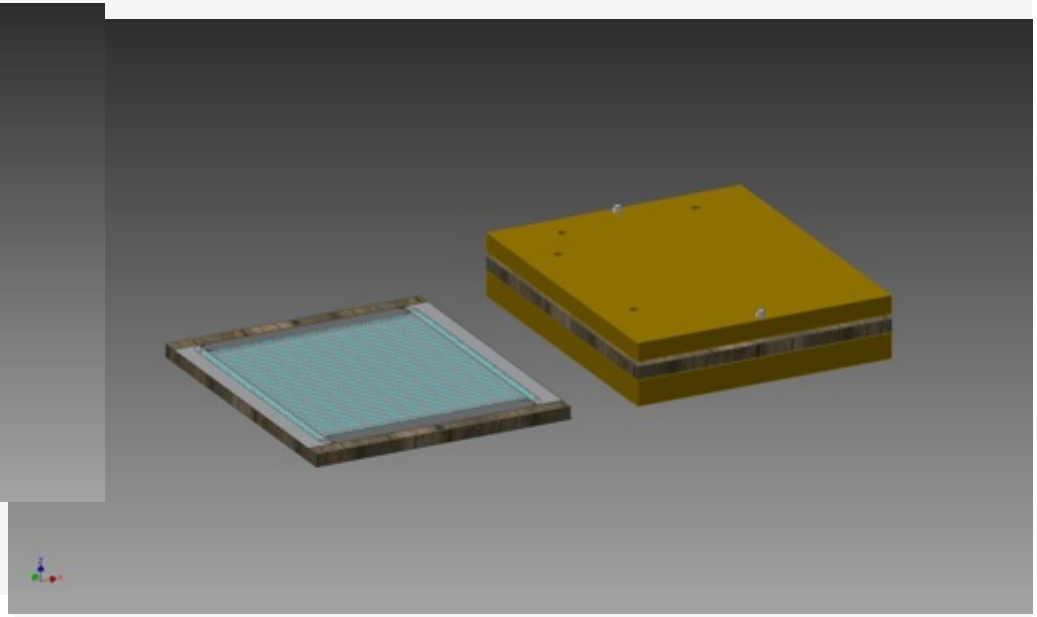
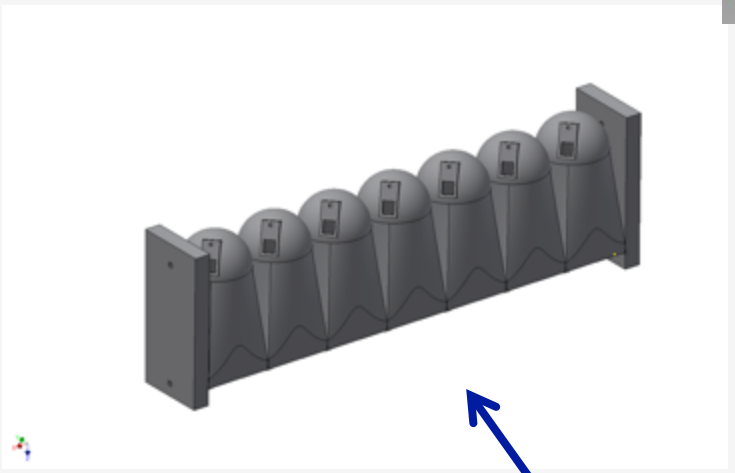
EMCal Prototype







"Droid Army" light collection

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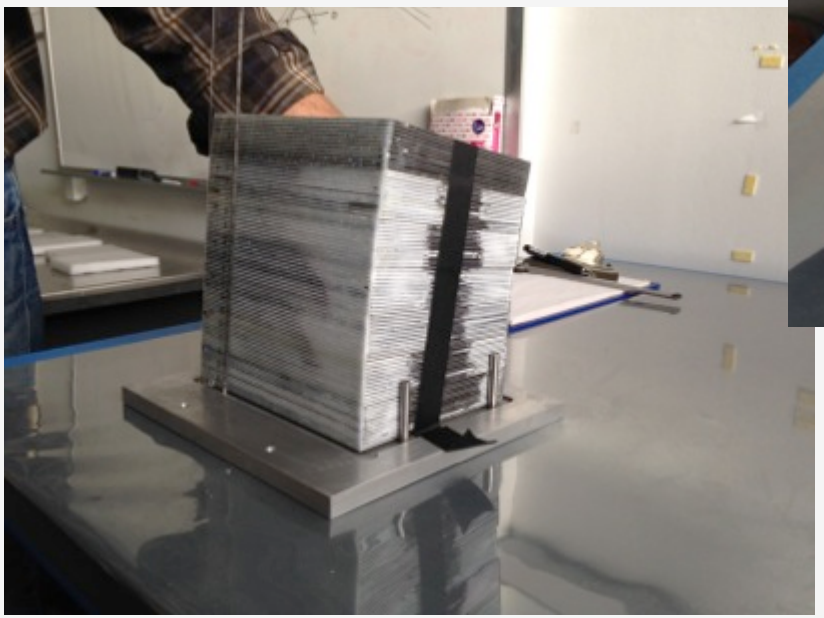

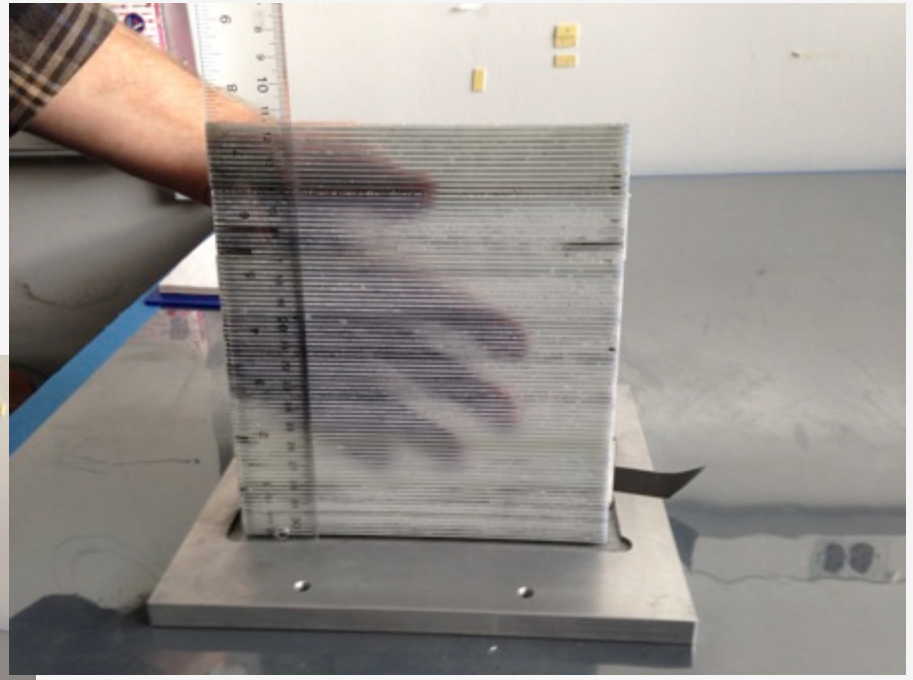

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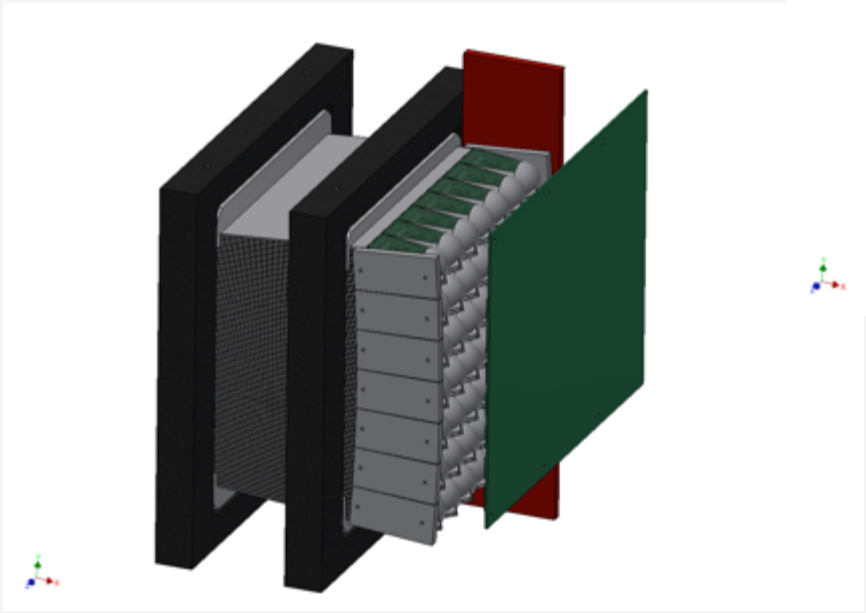

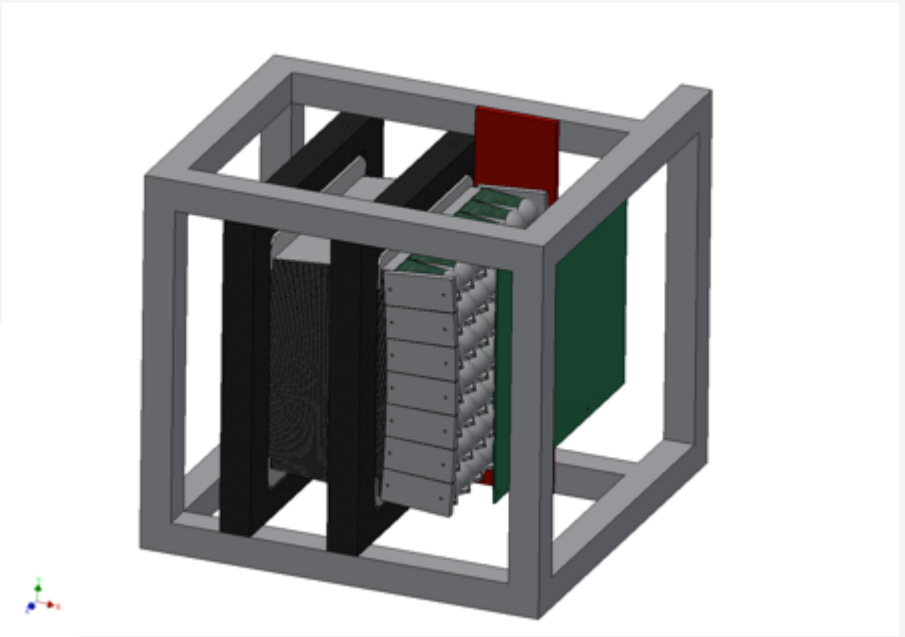

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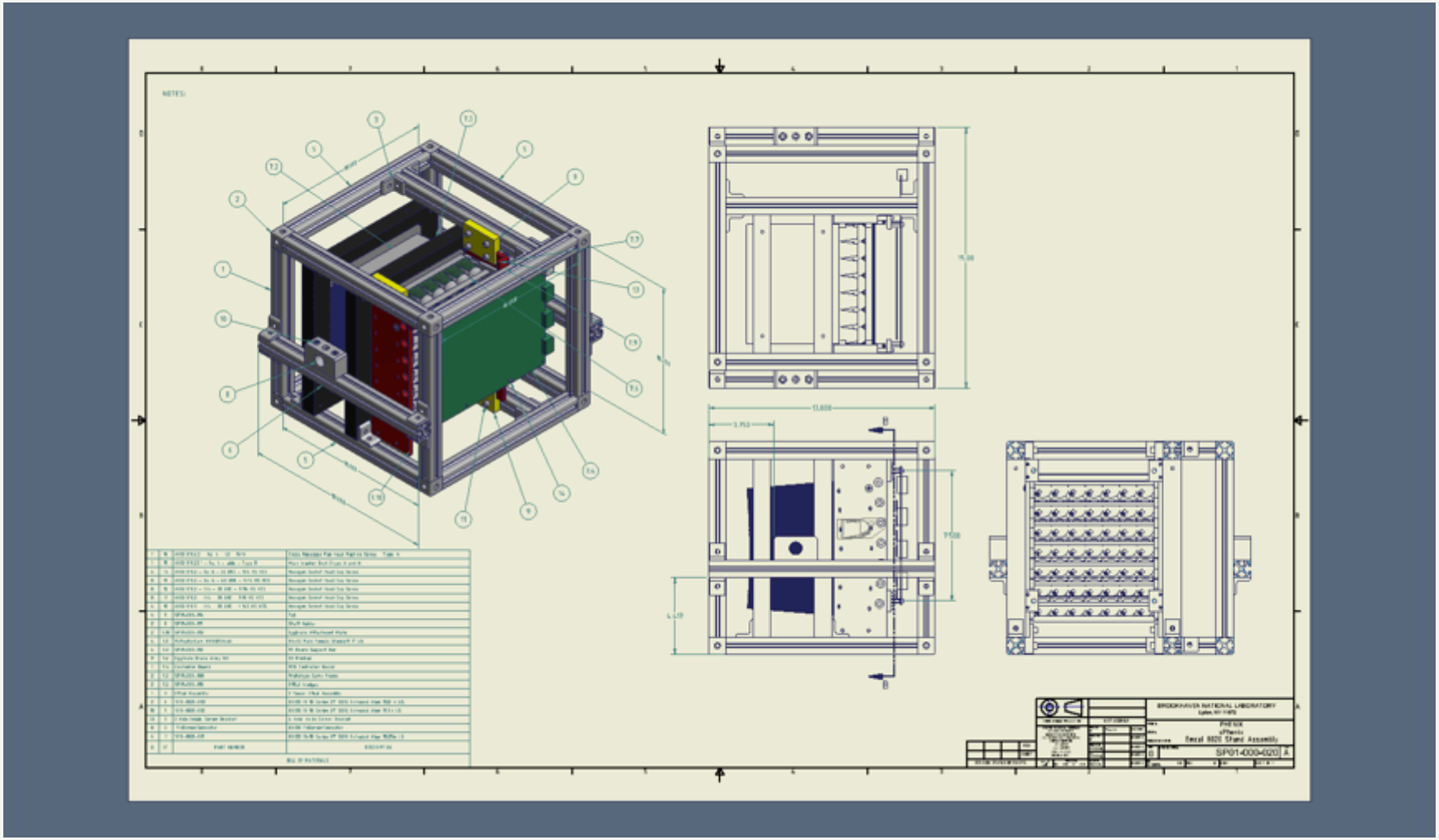
EMCal Support



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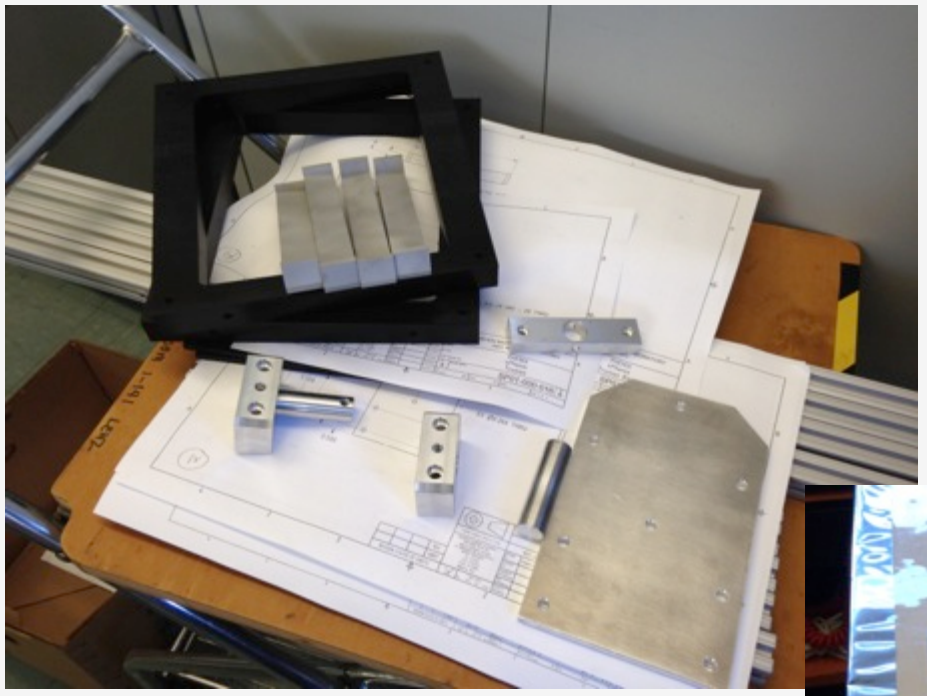
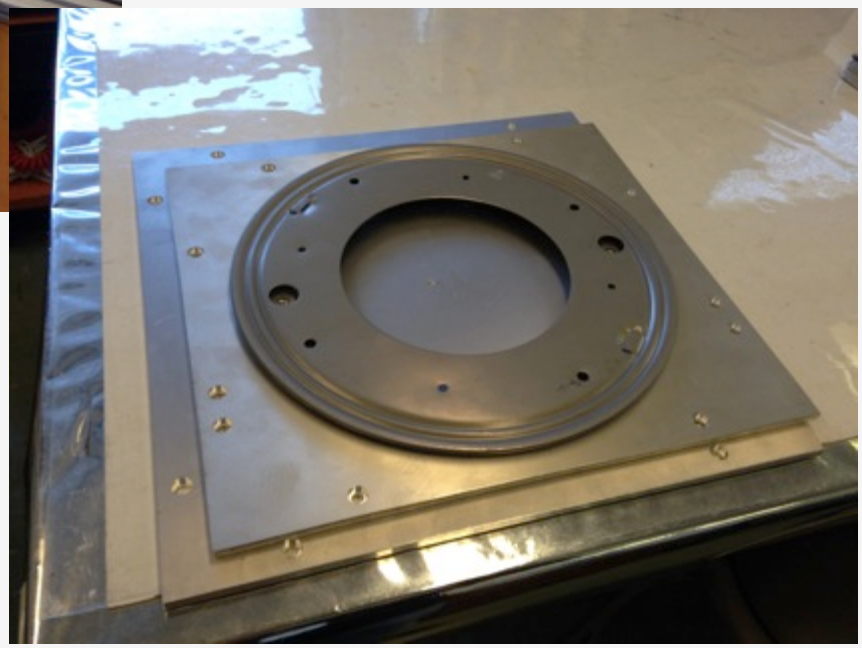
EMCal Support Structure Parts





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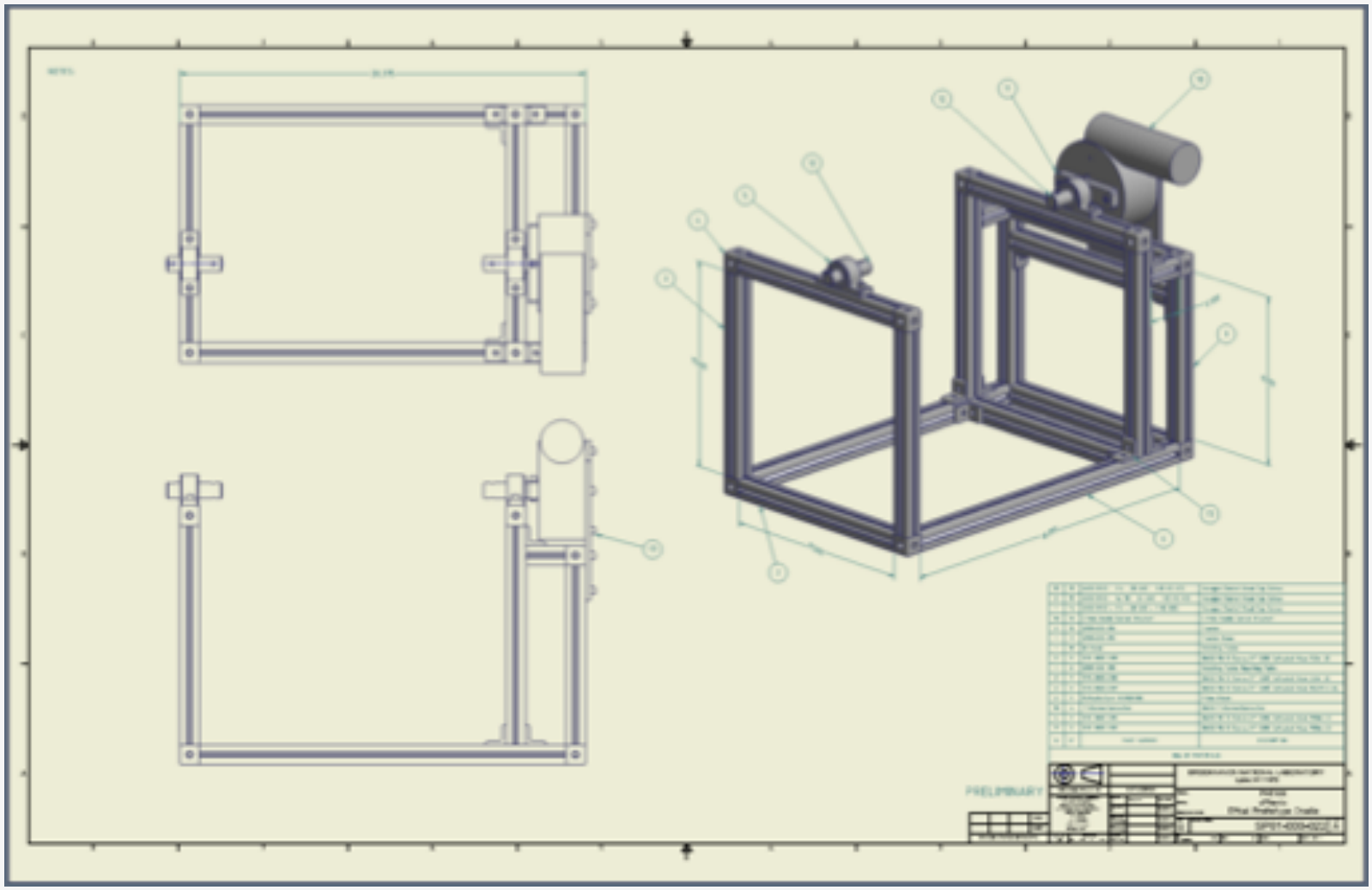

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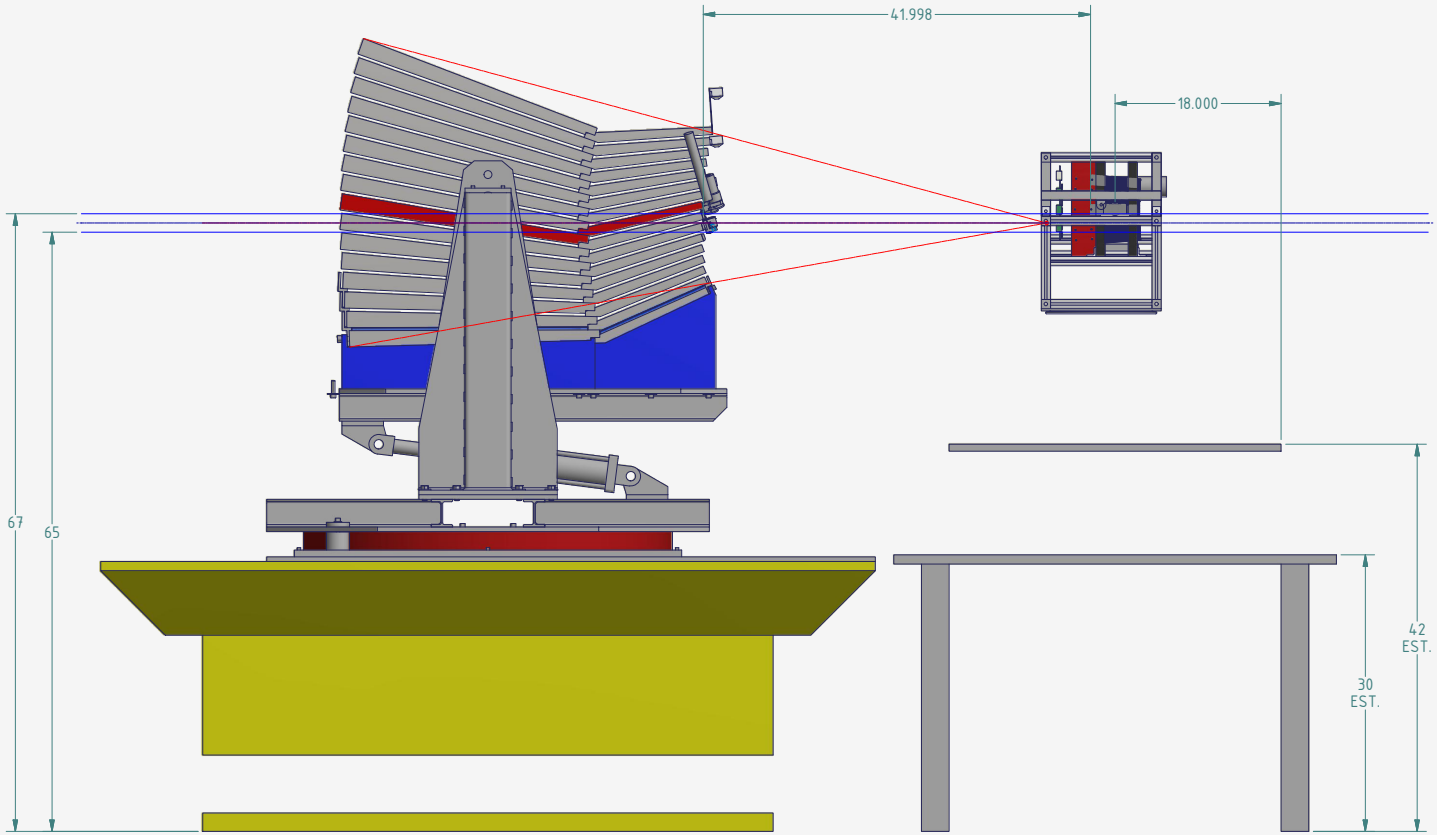

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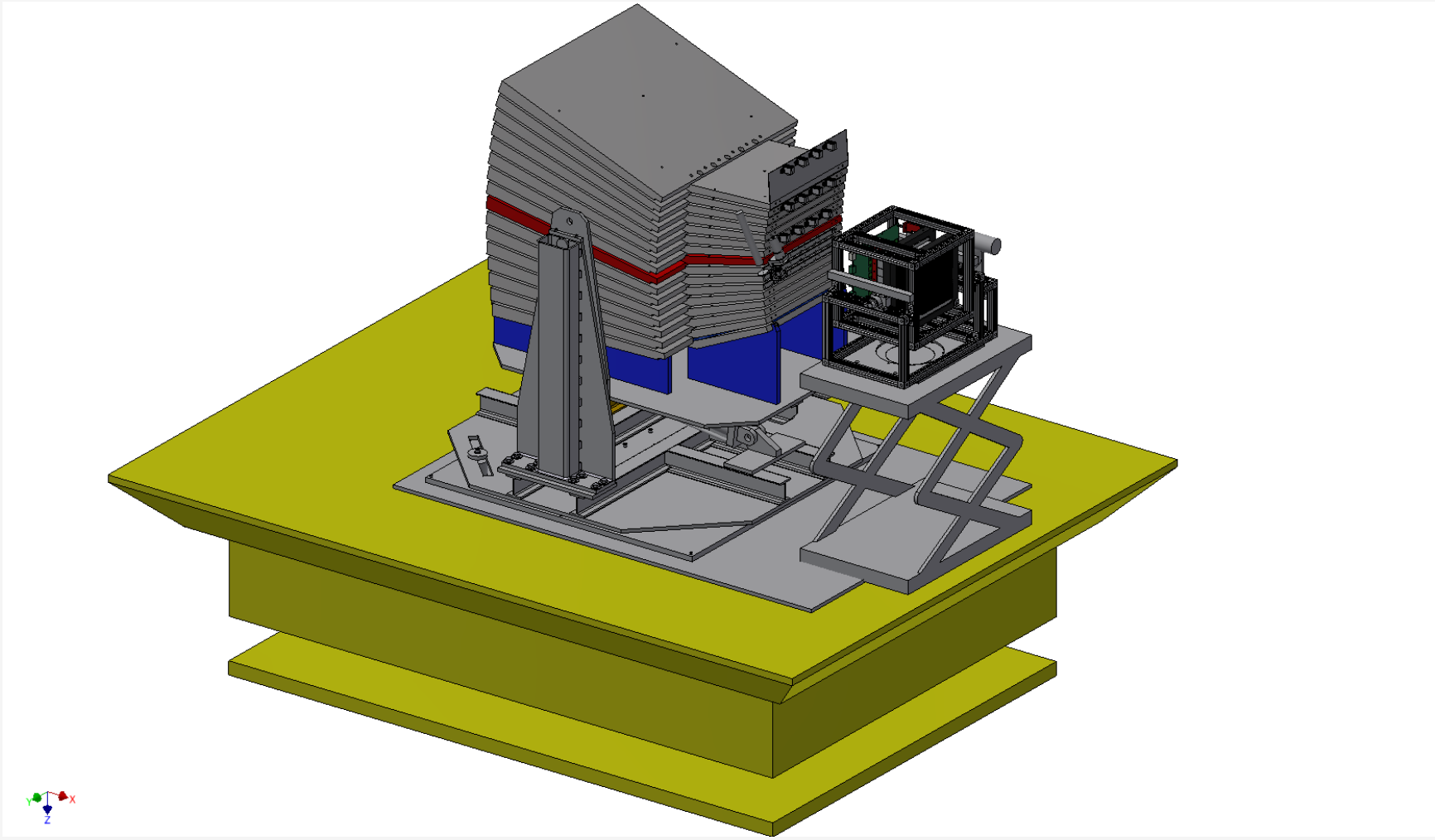

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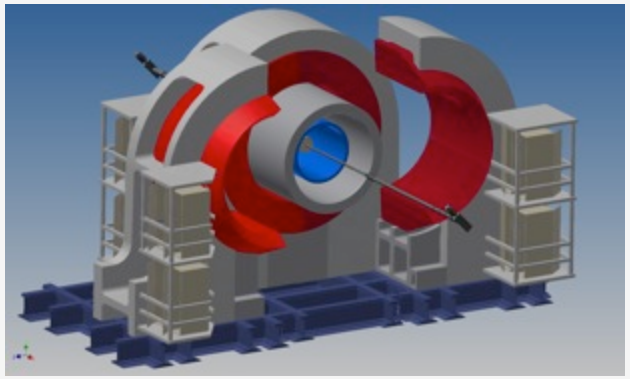

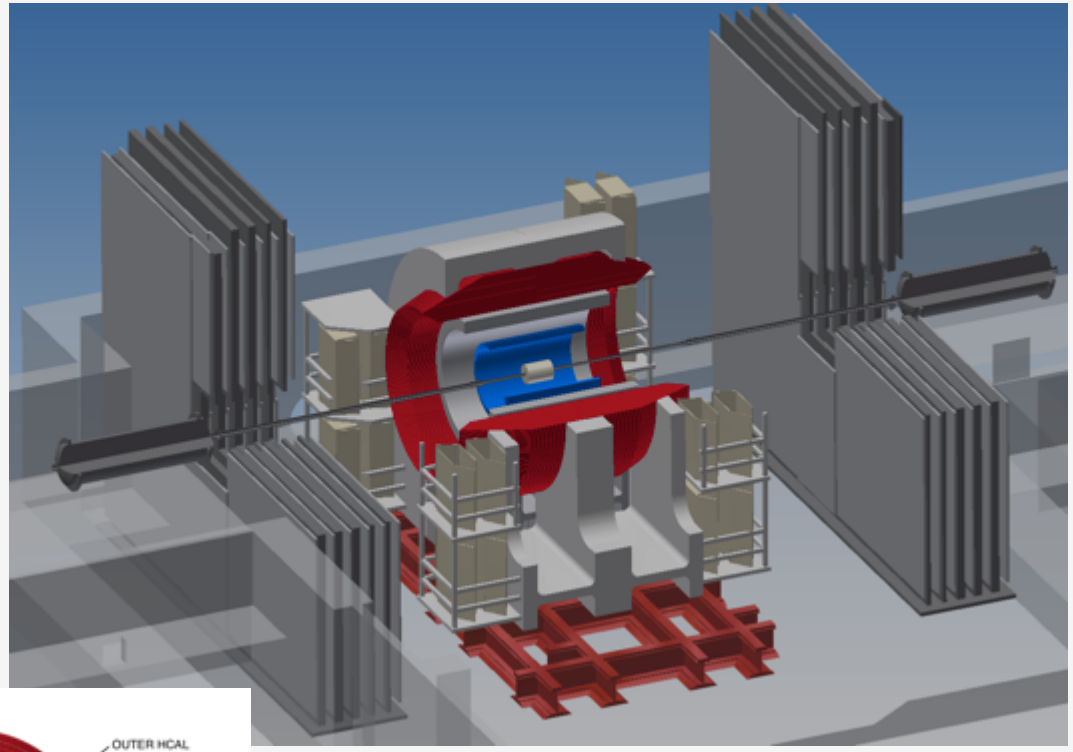

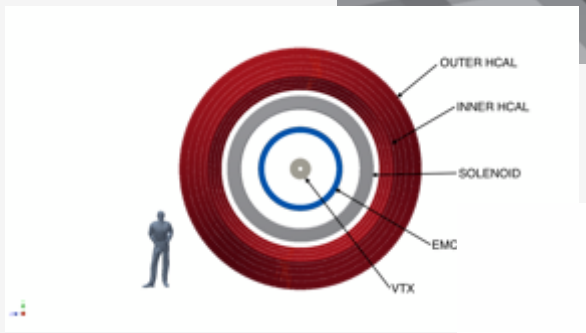

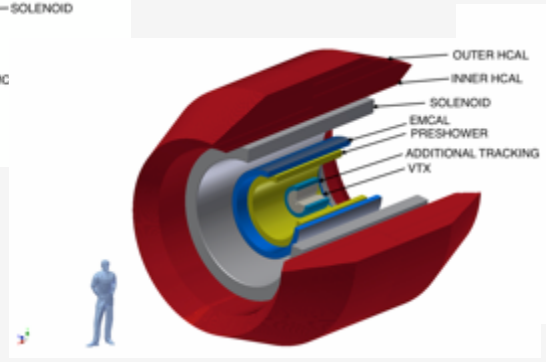

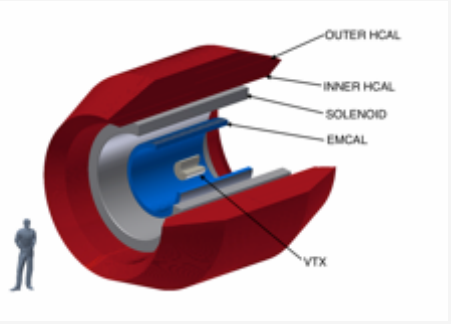

sPHENIX Modeling support for updated MIE

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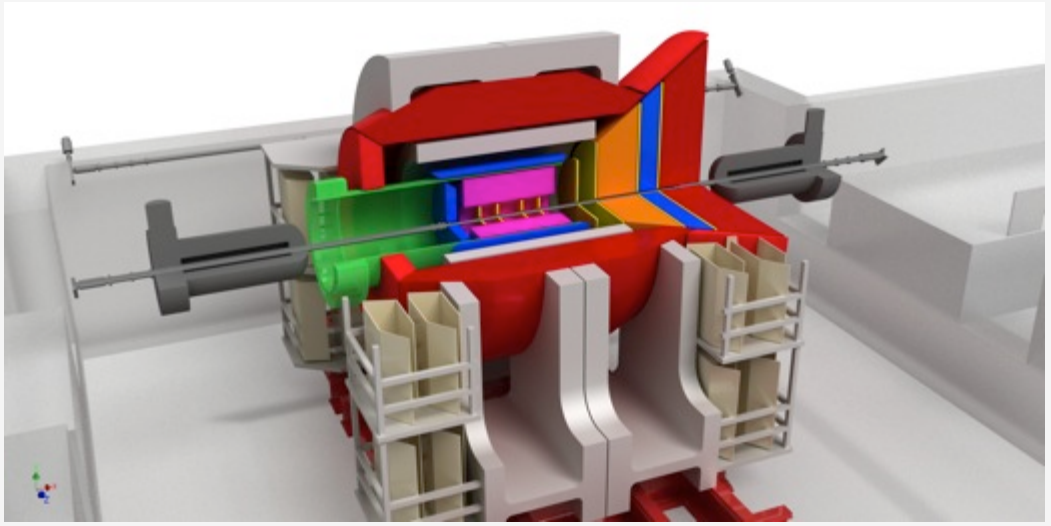
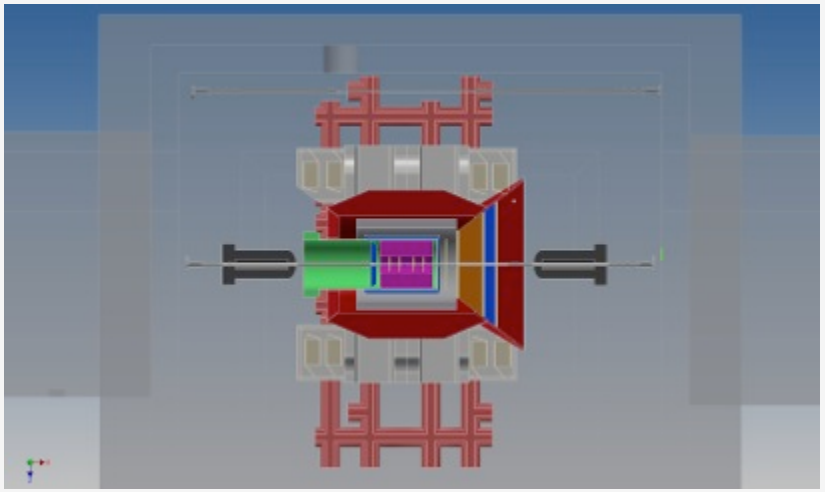
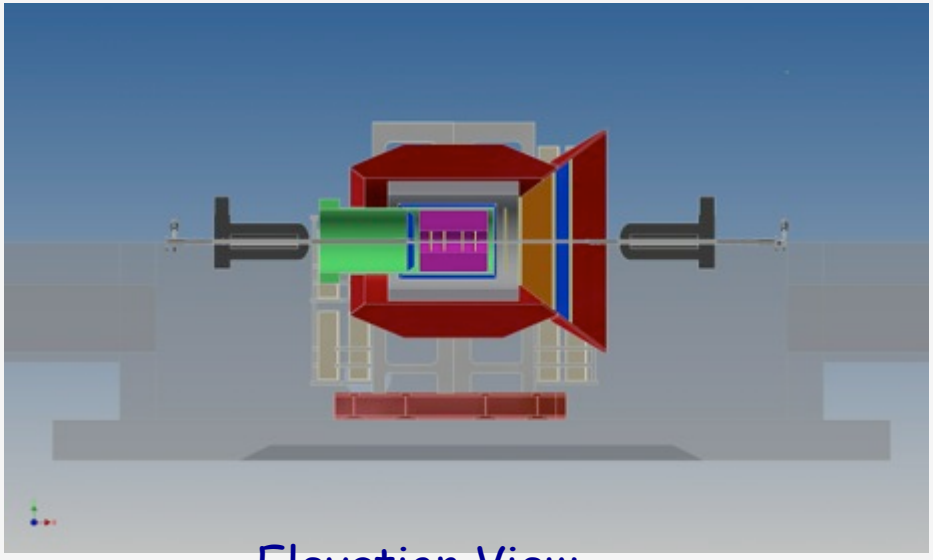
ePHENIX



Plan View





Elevation View

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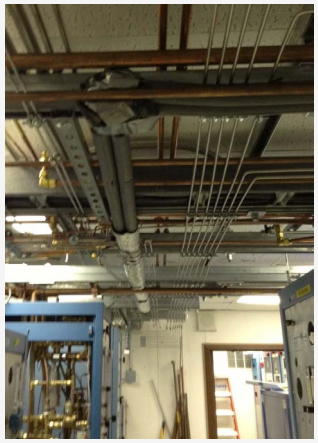
Re-Insulate Glycol lines

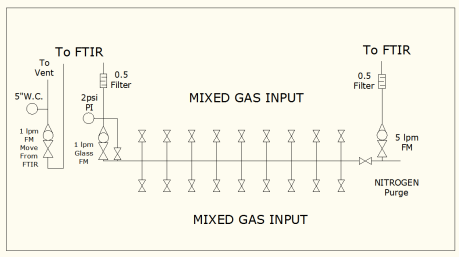


❖Remove old polyethylene insulation and wrap and replace with foam rubber insulation.

- •Temp of fluid is affected too much by temp change in the gas house.
- •Lines are condensing and dripping because of gaps in insulation.

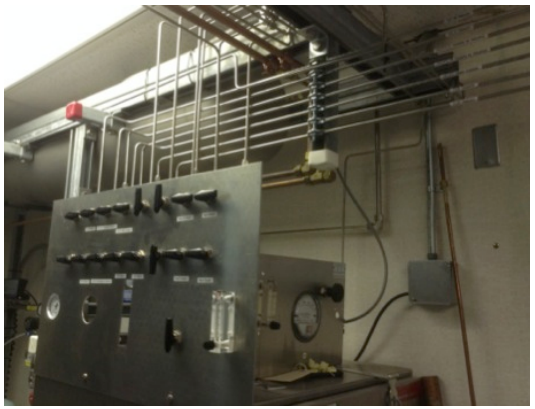
GMH Tasks:

Also need to complete Analyzer piping



Simple Manual Distribution Panel

System almost completed.
Will be ready for run 14



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Remaining 2013 Shutdown Schedule

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sPHENIX HCal & EMCal Prototype Assembly/test	8/19-1/20/2014
VTX/FVTX Bias, LV and signal Cabling and Cooling distribution	12/9-12/16/2013
MPC-Ex LV, Bias and signal cabling and cooling distribution	12/9-12/16/2013
MPC-Ex installed acceptance tests	12/11-12/12/2013
Remove and stow station 1 south scaffolding	12/13/2013
Pre-run commissioning and detector prep testing for run 14	12/9-1/31/2014
Prep for EC roll in (remove fibers, cooling water and gas)	12/16/2013
Remove manlifts from IR	12/17/2013
Remove deck plates from IR	12/17/2013
Move MuID Collars into IR hold position	12/17/2013
Remove 12 ton cart from IR	12/17/2013
Roll in EC to run position	12/18-12/19/2013
Re-connect gas sniffers, water, elect., gas, fibers to EC	12/20-12/24/2013
Fold down EC platforms & reinstall dumb waiter (carpenters)	12/20-12/24/2013
Reconnect EC dumbwaiter lift wiring and TOF blowers	12/26-12/27/2013
Move MMS to run position	12/26-12/27/2013
Install the MuID collars	12/26-12/27/2013
DC West wire repairs	12/15-12/30/2013
Restore all PHENIX Elec. from shutdown safe modes to operating modes	12/23-12/31/2013
Christmas Holiday	12/24-25/2013
New Year's Day Holiday	1/1/2014
Pink sheets	12/23-12/31/2013
White Sheets	1/2-1/3/2014
Assemble large shielding wall and install plug door (riggers)	1/6-1/10/2014
Blue Sheets	1/6-1/10/2014
Start Watch Shifts	1/7/2014
Start Flammable gas flow	1/13/2014
End of Shutdown Party	**???**
Close shield wall, install radiation interlocks and prepare for run 14	1/31/2014
Start run 14	2/3/2014

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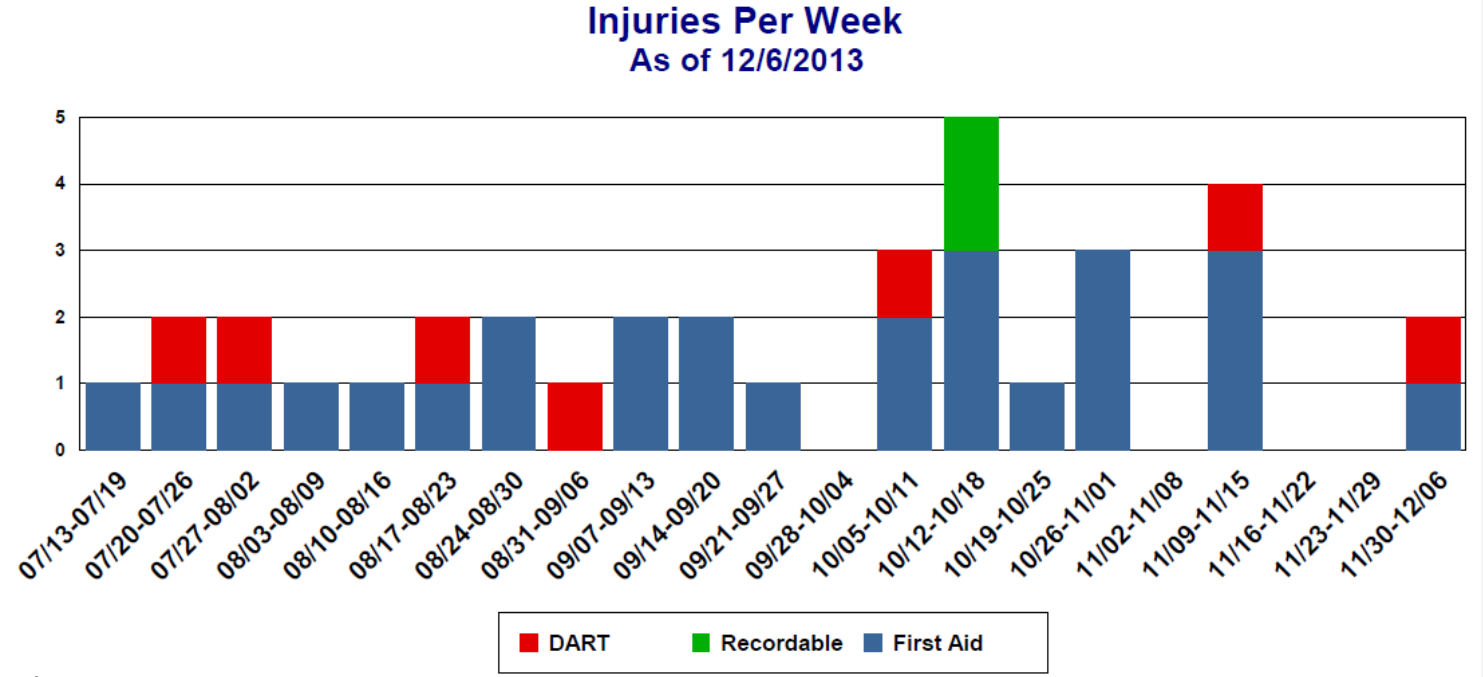
Safety and Security

From Ray Karol:

- Reminder for electrical cord usage rules:
- Position/configure electric cords so that they are not subject to physical damage and do not pose a tripping hazard. (If cords must be passed through an opening or doorway on a temporary basis, protection must be provided to protect cord from pinching or damage.)
- When fastening an electrical cord to any surface, do not staple, wire, nail, or use any other similar method that might damage the cord.
- Avoid bodily contact with grounded metal objects and water sources when handling electrical cords (e.g., extension cords, appliance cords, temporary power cords, multi-outlet strips, surge protectors).
- Do not plug or unplug electrical cords when your hands are wet or when you are standing in a damp location or in water.
- Always ensure that your hands/fingers are not touching exposed prongs when plugging in/unplugging electrical cords. When unplugging electrical cords, always ensure you pull on the plug itself, not the cord.
- When electrical cord plugs will not remain snuggly in a receptacle, report the condition to supervision so that the receptacle can be evaluated/replaced.
- Always turn off portable electrical tools and equipment before you unplug them.
- Never raise or lower electrical tools or equipment using the electrical cord.
- Multi-outlet strips and surge protectors must be plugged directly into a permanent receptacle. Multi-outlet strips and surge protectors may not be plugged into another multi-outlet strip or surge protector (daisy chained).
- All portable electrical equipment, electric tools and electrical cords must be visually inspected before each use for damage and/or external defects (e.g., loose, missing, broken or deformed parts; pinched or crushed outer coverings or insulation; insulation pulled away from plugs or tool/equipment housings; signs of overheating, sparks or smoke). Damaged or deformed equipment, tools and electrical cords must be removed from service.
- Ensure that all extension cords and portable electrical equipment are tested/listed by a nationally recognized testing laboratory (NRTL) such as UL or CSA.



Injury Status:

FY14 YTD: DART – 3, TRC – 5, First Aid – 13
FY13: DART – 14, TRC – 37, First Aid – 53
FY12: DART – 19, TRC – 38, First Aid – 69

FY13 Injury Listing: https://intranet.bnl.gov/esh/shsd/seg/OccInj/BNLInjuries.aspx

Recent Injuries		
12/3/13	First Aid	An employee was walking under a beam pipe and came into contact with a flange clamp causing a small cut just below the left eye. The OMC administered first aid and the employee will follow up with an ophthalmologist.
12/2/13	DART	An employee received multiple injuries, including a twisted ankle and fractured shoulder, from a fall in a parking lot after work. At a local emergency room, the employee was examined, treated for injuries and released.

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Recent Events		
11/25/13	SC-3	On November 25, 2013, a contractor safety representative discovered that an in-floor electrical conduit had been damaged by the core drilling activities of the prior week (November 15). The drilling of a hole approximately 6 inches in diameter started on November 15 and subsequent pipe installation took place over the next few days. The conduit was buried in the lower third of an approximately 5-inch thick floor slab. The floor drilling was done to facilitate the installation of a new fire sprinkler riser in the northwest stair tower of Bldg. 510. On the day of the drilling, there was no indication that an electrical conduit had been cut. On November 25, it was determined that the conduit had been energized when cut. There were no injuries. (Event Link)

Other Items:

Vacation Excess: must get your vacation down to 20 days by 1/20/2014.

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Where To Find PHENIX Engineering Info

Less than 3 weeks left in 2013.

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm